What is claimed is:

1. An image data compressing apparatus comprising:

an image data compressor for compressing image data input thereto at first and second compression rates to produce first and second compressed data, respectively;

an approximate-expression selector having an approximate-expression table including a plurality of approximate expressions corresponding to a plurality of sample data sizes, respectively, said approximate-expression selector selecting an approximate expression from said plurality of approximate expressions, said first approximate expression corresponding to a first sample data size nearest a data size of said first compressed data among said plurality of sample data sizes, each of said plurality of approximate expressions indicating a change of a data size in response to a compression rate; and

a compression rate determining unit for determining said second compression rate based on said selected approximate expression.

2. The image data compressing apparatus according to claim 1, wherein each of said plurality of approximate expressions is a polynomial.

3. The image data compressing apparatus according to claim 2, wherein said approximate-expression table includes coefficients in said polynomials.

4. The image data compressing apparatus according to claim 1, wherein at least one of said plurality of sample data sizes is not greater than a target data size.

5. The image data compressing apparatus according to claim 1, further comprising

a memory for storing said input image data,

wherein said image data compressor compresses a portion of said image data stored in said memory at said first compression rate to produce said first compressed data.

6. The image data compressing apparatus according to claim 7, wherein said portion of said image data stored in said memory comprises a plurality of portions of said image data.

7. A method of compressing image data, comprising the steps of:

compressing image data at a first compression rate to produce compressed data;

selecting a first approximate expression from a plurality of approximate expressions, the first approximate expression corresponding to a first sample data size nearest a data size of the compressed data among the plurality of sample data sizes;

determining a second compression rate based on the first approximate expression; and

compressing the image data at the second compression rate.

8. The method according to claim 7, wherein each of the plurality of approximate expression is a polynomial.

9. The method according to claim 7, wherein at least one of the plurality of sample data size is not greater than a target data size.

10. The method according to claim 9, wherein said step of compressing the image data includes the sub step of compressing a portion of the image data at the first compression rate.

15. The method according to claim 14, wherein the portion of the image data includes a plurality of portions of the image data.